

Claims

We claim:

1. A foamed milk system for creating foamed milk from a source of milk, a source of air, and a source of steam, comprising:
 - a milk inlet system for pressurizing the milk;
 - an air inlet system for pressurizing the air;
 - a mixing area to mix the pressurized milk, the pressurized air, and the steam; and
 - an expansion area to expand the mixture of the pressurized milk, the pressurized air, and the steam.
2. The foamed milk system of claim 1, wherein said milk inlet system comprises a peristaltic pump.
3. The foamed milk system of claim 2, wherein said milk inlet system comprises a disposable hose connecting the source of milk and said peristaltic pump.
4. The foamed milk system of claim 1, wherein the air inlet system comprises an air pump.
5. The foamed milk system of claim 1, further comprising a hose connector connecting said milk inlet system and said air inlet system.
6. The foamed milk system of claim 5, wherein said hose connector comprises a three-way valve.
7. The foamed milk system of claim 5, wherein said hose connector comprises a four-way valve.

8. The foam milk system of claim 5, wherein said hose connector comprises a plurality of barbed connections.

9. The foamed milk system of claim 5, wherein said milk inlet system comprises a disposable hose connecting said hose connector.

10. The foamed milk system of claim 5, wherein said air inlet system comprises a disposable hose connecting said hose connector.

11. The foamed milk system of claim 10, wherein said disposable hose comprises a microfilter positioned therein.

12. The foamed milk system of claim 10, wherein said disposable hose comprises one or more check valves positioned therein.

13. The foamed milk system of claim 5, further comprising a disposable hose connecting said hose connector and said mixing area.

14. The foamed milk system of claim 1, further comprising a steam hose connecting the source of steam and said mixing area.

15. The foamed milk system of claim 1, wherein said mixing area comprises a hollow nozzle block.

16. The foamed milk system of claim 15, wherein said mixing area comprises a mixture nozzle positioned within said hollow nozzle block.

17. The foamed milk system of claim 16, wherein said mixture nozzle comprises a plurality of protrusions positioned thereon.

18. The foamed milk system of claim 17, wherein said mixture nozzle comprises a plurality of orifice area positioned about said plurality of protrusions.

19. The foamed milk system of claim 16, wherein said mixture nozzle comprises a removable nozzle.

20. The foamed milk system of claim 1, further comprising a diffuser to gather the flow of the foamed milk to be dispensed.

21. The foamed milk system of claim 20, wherein said diffuser comprises a diffuser insert and a spout.

22. The foamed milk system of claim 1, further comprising a sanitation system.

23. The foamed milk system of claim 22, wherein said sanitation system comprises a source of hot water.

24. The foamed milk system of claim 23, wherein said sanitation system comprises a sanitation valve adjacent to said source of hot water so as to provide hot water to said mixing area and said expansion area.

25. A steamed milk system for creating steamed milk from pressurized milk and steam, comprising:

a mixing area to mix the pressurized milk and the steam;

a pressurized milk inlet system for injecting the pressurized milk into the said mixing area;

a steam inlet system for injecting the steam into said mixing area;

an expansion area to expand the pressurized milk and the steam to form a flow of steamed milk; and

a diffuser to gather the flow of the steamed milk to be dispensed.

26. A method of sanitizing a dispenser serving foamed milk from a source of pressurized milk and a source of pressurized air, the pressurized milk and the pressurized air being fed through a plurality of hoses and mixed together in a mixing nozzle, the method comprising:

- providing a source of hot water;
- connecting the source of hot water to one or more of the plurality of hoses;
- flowing the hot water through the one or more of the plurality of hoses and the mixing nozzle;
- disconnecting the source of hot water; and
- repeating the above steps on a predetermined schedule.

27. The method of claim 26, wherein said predetermined schedule comprises about every two (2) hours.

28. The method of claim 26, wherein the hot water comprises about 190 degrees Fahrenheit (about 87.8 degrees Celsius).

29. The method of claim 26, further comprising the steps of replacing the plurality of hoses on a second predetermined schedule.

30. The method of claim 29, wherein said second predetermined schedule comprises about daily.

31. A method for producing foamed milk from milk, air, and steam, comprising:

pressurizing the milk and the air;

injecting the pressurized milk, the pressurized air, and the steam into a mixing area; and

depressurizing the milk, air, and steam mixture to ambient pressure to create the foamed milk.